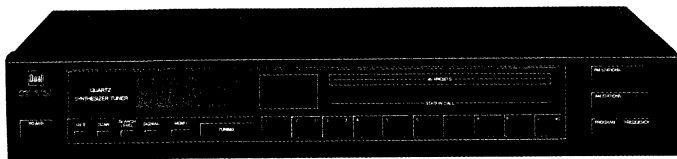


# CT 7050

Dual

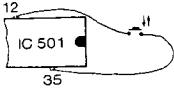
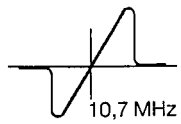
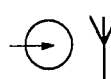
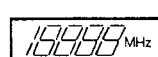
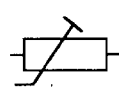


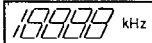
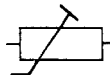
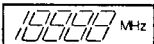
## Service-Anleitung Service Manual Instructions de Service

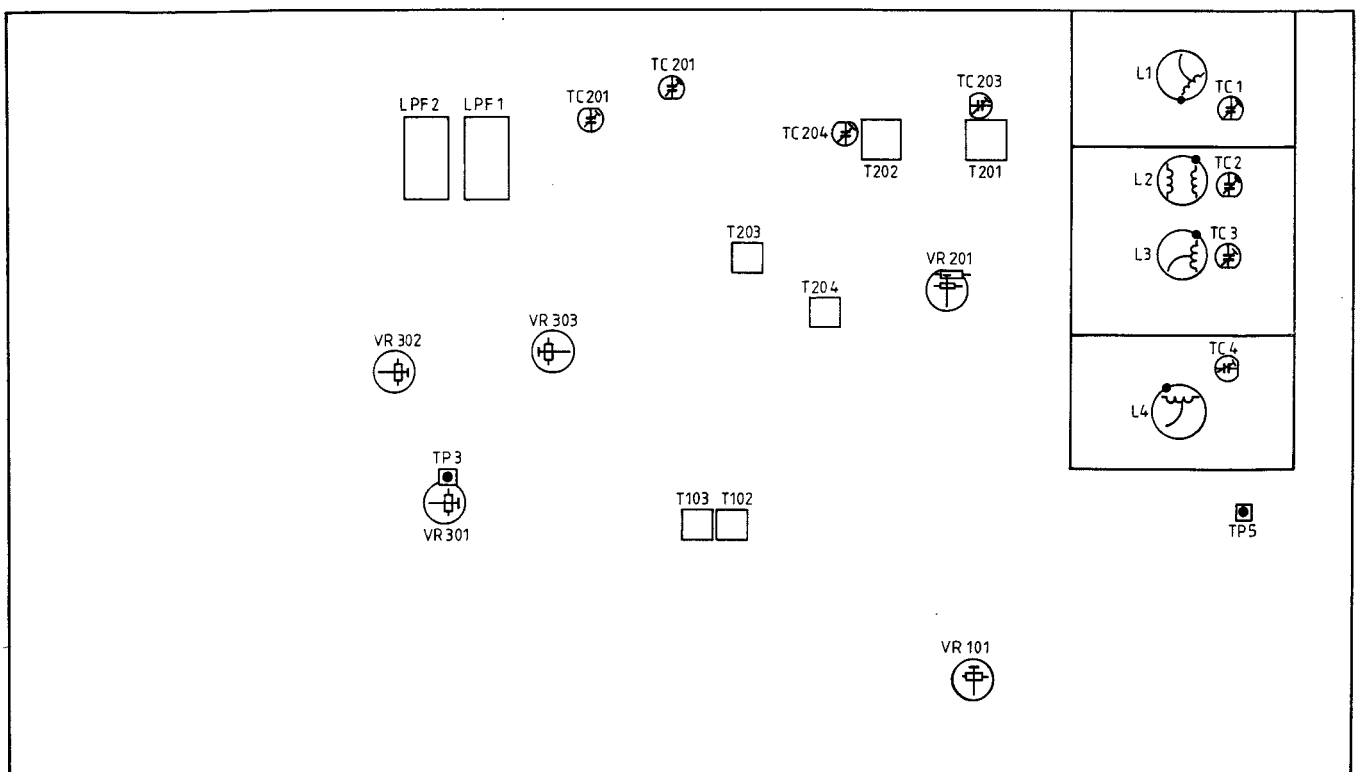
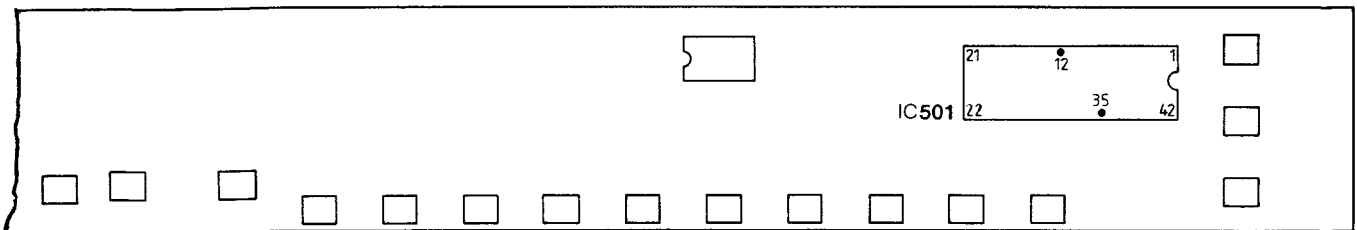
| Technische Daten<br>(typische Werte)                                                                             | Technical data<br>(typical value)                                                                                            | Caractéristiques techniques<br>(valeur caractéristique)                                                                            | CT 7050                                          |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Empfangsbereiche</b><br>FM (UKW)<br>MW<br>LW                                                                  | <b>Wave bands</b><br>FM (VHF)<br>MW<br>LW                                                                                    | <b>Gammes d'ondes</b><br>FM (O.U.C.)<br>P.O.<br>G.O.                                                                               | 87,5– 108 MHz<br>520 – 1619 kHz<br>150 – 283 kHz |
| <b>Empfindlichkeit</b><br>FM-Mono<br>(75 Ohm, 26 dB Rauschabstand)<br>FM-Stereo<br>(75 Ohm, 46 dB Rauschabstand) | <b>Sensitivity</b><br>FM-Mono<br>(75 Ohm, signal-to-noise ratio 26 dB)<br>FM-Stereo<br>(75 Ohm, signal-to-noise ratio 46 dB) | <b>Sensibilité</b><br>FM-mono<br>(75 ohms, rapport signal/bruit de 26 dB)<br>FM-stéréo<br>(75 ohms, rapport signal/bruit de 46 dB) | 0,8 $\mu$ V<br>30 $\mu$ V                        |
| <b>Geräuschspannungsabstand (IHF)</b><br>Stereo (1 kHz/46 kHz Hub)                                               | <b>Signal-to-noise ratio, weighted (IHF)</b><br>Stereo (1 kHz/46 kHz)                                                        | <b>Rapport signal/bruit (IHF)</b><br>Stéréo (1 kHz/46 kHz)                                                                         | 70 dB                                            |
| <b>Klirrfaktor</b><br>Stereo (1 kHz/46 kHz Hub)                                                                  | <b>Harmonic distortion</b><br>Stereo (1 kHz/46 kHz)                                                                          | <b>Taux de distorsion</b><br>Stéréo (1 kHz/46 kHz)                                                                                 | 0,20 %                                           |
| <b>Übersprechdämpfung</b> bei 1 kHz                                                                              | <b>Channel separation</b> at 1,000 Hz                                                                                        | <b>Diaphonie stéréo</b> (à 1 kHz)                                                                                                  | 45 dB                                            |
| <b>NF-Frequenzgang</b><br>für Preemphasis 50 $\mu$ s–3 dB                                                        | <b>AF frequency response</b><br>for 50 $\mu$ s pre-emphasis – 3 dB                                                           | <b>Bande passante BF</b><br>pour pré-emphasis 50 $\mu$ s à 3 dB                                                                    | 10 Hz–16 kHz                                     |
| <b>Trennschärfe</b>                                                                                              | <b>Selectivity</b>                                                                                                           | <b>Sélectivité</b>                                                                                                                 | 70 dB                                            |
| <b>NF-Ausgangsspannung</b>                                                                                       | <b>AF output level</b>                                                                                                       | <b>Tension de sortie BF</b>                                                                                                        | ca. 500 mV                                       |
| <b>Netzspannung</b>                                                                                              | <b>Line voltage</b>                                                                                                          | <b>Tension secteur</b>                                                                                                             | 230 V                                            |
| <b>Leistungsaufnahme</b>                                                                                         | <b>Power requirement</b>                                                                                                     | <b>Consommation</b>                                                                                                                | 19 Watt                                          |

|  | <b>(D)</b><br>Zeichenerklärung | <b>(GB)</b><br>Legend       | <b>(F)</b><br>Légende             | <b>(E)</b><br>Leyenda            | <b>(I)</b><br>Leggenda               |
|--|--------------------------------|-----------------------------|-----------------------------------|----------------------------------|--------------------------------------|
|  | Ein                            | On                          | Marche                            | Encendido                        | Acceso                               |
|  | Aus                            | Off                         | Arrêt                             | Apagado                          | Spento                               |
|  | Ein-Aus                        | On-Off                      | Marche-Arrêt                      | Encendido-Apagado                | Acceso-Spento                        |
|  | Bereitschaft                   | Stand-by                    | Attente (veille)                  | Espera                           | Disponibile                          |
|  | Lautstärke                     | Volume                      | Volume                            | Volumen                          | Volumen                              |
|  | Balance                        | Balance                     | Balance                           | Balance                          | Balance                              |
|  | Höhen                          | Treble                      | Aiguës                            | Agudos                           | Alti                                 |
|  | Bässe                          | Bass                        | Graves                            | Graves                           | Bassi                                |
|  | Lautsprecher                   | Loudspeaker                 | Haut-Parleur                      | Altavoz                          | Alto parlante                        |
|  | Kopfhörer                      | Headphones                  | Casque                            | Auriculares                      | Cuffia                               |
|  | Hörkapsel                      | Earphones                   | Ecouteur                          | Auricular                        | Cuffia                               |
|  | Stummschaltung                 | Muting                      | Silencieux                        | Circuito silencioso              | Sintonia Silenziosa                  |
|  | Abstimmen                      | Tuning                      | Syntonisation                     | Sintonía                         | Sintonia                             |
|  | Empfangsfrequenz-Regelung      | Automatic frequency control | Contrôle automatique de fréquence | Control automático de frecuencia | Controllo automatico delle frequenza |
|  | Normal-Lauf                    | Normal-run                  | Défilement normal                 | Velocidad normal                 | Sfilamento normale                   |
|  | Schnell-Lauf                   | Fast-run                    | Défilement rapide                 | Velocidad rapida                 | Sfilamento rapido                    |
|  | Pause                          | Pause                       | Pause                             | Pausa                            | Pause                                |
|  | Auswurf                        | Eject                       | Ejection                          | Expulsión                        | Eiezione                             |
|  | Stop                           | Stop                        | Stop                              | Stop                             | Stop                                 |
|  | Stop / Eject                   | Stop / Eject                | Stop / Eject                      | Stop / Eject                     | Stop / Eject                         |
|  | Microphon                      | Microphone                  | Microphone                        | Micrófono                        | Microfono                            |
|  | Tonbandgerät                   | Tape recorder               | Magnétophone                      | Magnetófono                      | Magnetofono                          |
|  | Aufnahme                       | Recording                   | Enregistrement                    | Grabación                        | Registrazione                        |
|  | Wiedergabe                     | Play-back                   | Lecture                           | Reproducción                     | Riproduzione                         |
|  | Antenne                        | Aerial                      | Antenne                           | Antena                           | Antenne                              |
|  | Dipole                         | Dipole                      | Dipôle                            | Dipole                           | Dipole                               |
|  | Tuner                          | Tuner                       | Radio-récepteur                   | Sintonizador                     | Tuner                                |
|  | Plattenspieler                 | Pick-up                     | Lecteur de disques                | Giradiscos                       | Giradischi                           |
|  | Mono                           | Mono                        | Mono                              | Mono                             | Mono                                 |
|  | Stereo                         | Stereo                      | Stereo                            | Estereo                          | Stereo                               |
|  | Uhr, Timer                     | Clock, Timer                | Horloge, minuterie                | Reloj, Timer                     | Orologio, Timer                      |
|  | Output                         | Output                      | Sortie d'un signal                | Salida de señales                | Uscita di segnale                    |
|  | Input                          | Input                       | Entrée d'un signal                | Entrada de señales               | Ingresso di segnale                  |
|  | Trimmer                        | Trimmer                     | Trimmer                           | Trimmer                          | Trimmer                              |
|  | Einstellregler                 | Adjuster                    | Potentiomètre ajustable           | Potenciómetro ajustable          | Trimmer ohmico                       |
|  | Abgleichbarer Kreis            | Circuit can be aligned      | Circuit à aligner                 | Circuito ajustable               | Circuito a alineare                  |
|  | L.E.D.                         | L.E.D.                      | L.E.D.                            | L.E.D.                           | L.E.D.                               |
|  | Photodiode                     | Photodiode                  | Photodiode                        | Fotodiodo                        | Photodiodo                           |
|  | Messpunkt                      | Test point                  | Point test                        | Punto de prueba                  | Punto di riferimento                 |

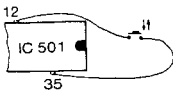
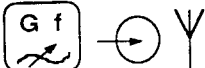
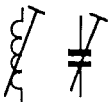
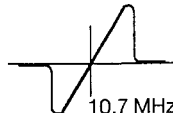
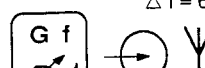
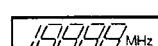
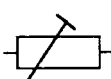
## Abgleich / Alignment / Reglages

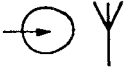
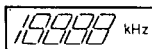
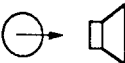
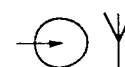
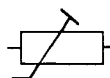
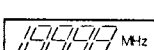
| µP nach FM- und AM-Filter justieren (nur bei gelöschtem IC 501) · Adjust µP to FM- and AM filter (only with erased IC 501) |    |                                                                                                                                                                                                                                                                         |                                                                                    |                                                                                                                          |                                                                                                                                 |                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                            | 1  | <div></div><br>(kurzschließen 1 s) · Short circuit longer then 1 s                                                                                                                     |                                                                                    |                                                                                                                          |                                                                                                                                 |                                                                                                                                |
|                                                                                                                            | 2  | FM-Taste drücken<br>Press FM key                                                                                                                                                                                                                                        | z. B. Keramikfilter „rot“<br>e.g. Ceramic filter „red“                             | 10,70 MHz                                                                                                                | 〈 man. tuning 〉<br>- +                                                                                                          |                                                                                                                                |
|                                                                                                                            | 3  | AM-Taste drücken<br>Press AM key                                                                                                                                                                                                                                        |                                                                                    | 455 kHz                                                                                                                  |                                                                                                                                 |                                                                                                                                |
|                                                                                                                            | 4  | Netzschalter aus/ein<br>Power switch off/on                                                                                                                                                                                                                             |                                                                                    |                                                                                                                          |                                                                                                                                 |                                                                                                                                |
| FM                                                                                                                         |    |                                                                                                                                                                                                                                                                         |                                                                                    |                                                                                                                          |                                                                                                                                 |                                                                                                                                |
|                                                                                                                            |    | <div><math>\Delta f = 75 \text{ kHz}</math>   <math>f = 1 \text{ kHz}</math></div> <div> </div>       |                                                                                    | <div><math>f</math></div> <div></div>   |                                              |                                             |
| ZF                                                                                                                         | 1  | <div> <math>V_e \sim 1 \text{ mV}</math></div>                                                                                                                                         | z. B. Keramikfilter „rot“<br>e.g. Ceramic filter „red“<br>10,70 MHz                | Senderfreie<br>Frequenz<br>Transmitting-free<br>frequency<br>z. B. 98 MHz                                                | T 101, T 102, T 103                                                                                                             | TP 7<br><br>10,7 MHz                        |
|                                                                                                                            | IF | 2                                                                                                                                                                                                                                                                       | Antenne an 75 Ohm<br>Antenneneingang<br><br>Antenna<br>to 75 ohms<br>antenna input |                                                                                                                          | Starken<br>FM-Sender auf<br>seiner Sollfrequenz<br>empfangen<br>tune noise free<br>station to<br>nom. transmitting<br>frequency | T. 103                                                                                                                         |
| FM                                                                                                                         | 3  |                                                                                                                                                                                                                                                                         |                                                                                    | 87,5 MHz                                                                                                                 | L 4                                                                                                                             |  TP 5 $V = 4 \text{ V} \pm 0,1 \text{ V}$ |
|                                                                                                                            | 4  |                                                                                                                                                                                                                                                                         |                                                                                    | 108 MHz                                                                                                                  | TC 4                                                                                                                            |  TP 5 $V = 23,5 \text{ V}$                |
|                                                                                                                            | 5  | $V_e \sim 1,5 \mu\text{V}$                                                                                                                                                                                                                                              | 90 MHz                                                                             | 90 MHz                                                                                                                   | L1-L2-L3                                                                                                                        |  max.                                     |
|                                                                                                                            | 6  |                                                                                                                                                                                                                                                                         | 106 MHz                                                                            | 106 MHz                                                                                                                  | TC 1-TC 2-TC 3                                                                                                                  |                                                                                                                                |
| Decoder                                                                                                                    |    |                                                                                                                                                                                                                                                                         |                                                                                    |                                                                                                                          |                                                                                                                                 |                                                                                                                                |
|                                                                                                                            |    | <div><math>\Delta f = 67,5 \text{ kHz}</math>   <math>f = 1 \text{ kHz}</math></div> <div> </div> |                                                                                    | <div><math>f</math></div> <div></div> |                                            |                                           |
|                                                                                                                            | 1  | modul. off                                                                                                                                                                                                                                                              | 98 MHz                                                                             | 98 MHz                                                                                                                   | VR 301                                                                                                                          |  TP 3 $F = 19 \text{ kHz}$                |
|                                                                                                                            | 2  | r. channel modul.                                                                                                                                                                                                                                                       | 98 MHz                                                                             | 98 MHz                                                                                                                   | VR 302                                                                                                                          | l. ch. minimum                                                                                                                 |
|                                                                                                                            | 3  | l. channel modul.                                                                                                                                                                                                                                                       | 98 MHz                                                                             | 98 MHz                                                                                                                   | VR 302                                                                                                                          | r. ch. minimum                                                                                                                 |
|                                                                                                                            | 4  | $V_e \approx 1 \text{ mV}$<br>19 kHz Pilot ohne Mod.<br>19 kHz Pilot without mod.                                                                                                                                                                                       | 98 MHz                                                                             | 98 MHz                                                                                                                   | LPF 1                                                                                                                           | r. ch. minimum                                                                                                                 |
|                                                                                                                            |    |                                                                                                                                                                                                                                                                         |                                                                                    |                                                                                                                          | LPF 2                                                                                                                           | l. ch. minimum                                                                                                                 |

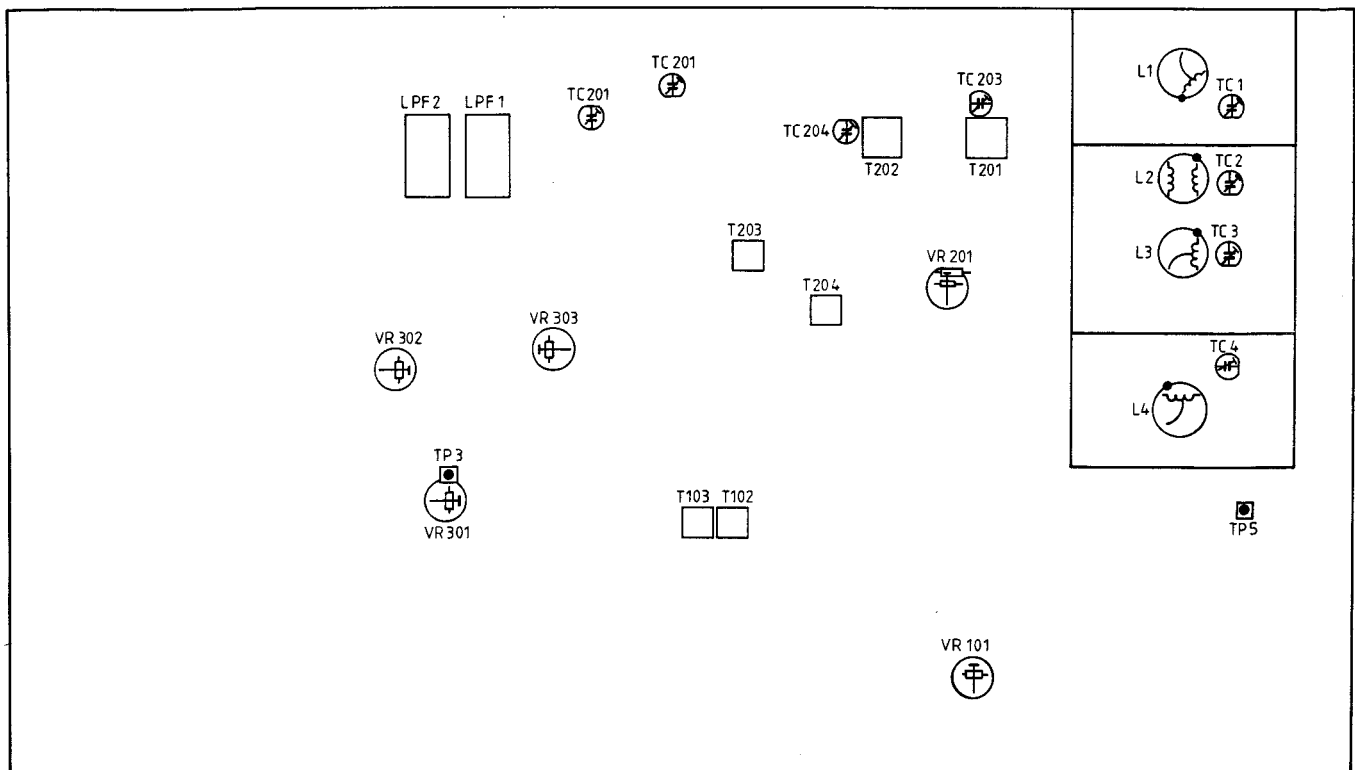
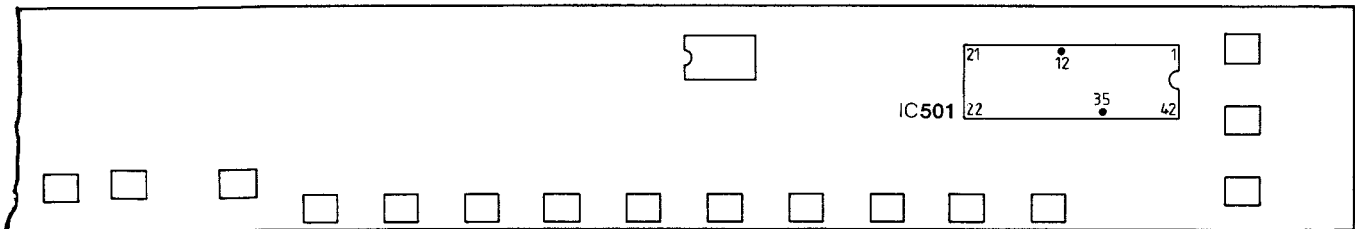
| AM                        |    |                                                                                                                                                                                                                                                                            |          |                                                                                   |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |                                                                                          |
|---------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                           |    | 30 % mod. 1000 Hz<br>   | f        |  |   |    |                                                                                          |
| ZF<br>IF                  | 1  | 10 – 100 mV                                                                                                                                                                                                                                                                | 455 kHz  |                                                                                   | IFT 203                                                                                                                                                               | max.                                                                                                                                                                                                                                                        |                                                                                          |
|                           | 2  | 455 kHz                                                                                                                                                                                                                                                                    |          |                                                                                   | IFT 204                                                                                                                                                               |                                                                                                                                                                                                                                                             |                                                                                          |
|                           |    |                                                                                                                                                                                                                                                                            |          |                                                                                   |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |                                                                                          |
| MW                        | 3  |                                                                                                                                                                                                                                                                            |          | 520 kHz                                                                           | T 201                                                                                                                                                                 | V = 1,3 V                                                                                                                                                                                                                                                   |  TP 5 |
|                           | 4  |                                                                                                                                                                                                                                                                            |          | 1619 kHz                                                                          | TC 203                                                                                                                                                                | V = 23,5 V                                                                                                                                                                                                                                                  |                                                                                          |
|                           | 5  | Ve ~ 400 μV/m                                                                                                                                                                             | 600 kHz  | 600 kHz                                                                           |  (Ferrit Ant.)<br>(Bar Ant.)                                                         | max.                                                                                                                                                                                                                                                        |                                                                                          |
|                           | 6  |                                                                                                                                                                                                                                                                            | 1400 kHz | 1400 kHz                                                                          | TC 201                                                                                                                                                                |                                                                                                                                                                                                                                                             |                                                                                          |
| LW                        | 7  |                                                                                                                                                                                                                                                                            |          | 150 kHz                                                                           | T 202                                                                                                                                                                 | V = 2,4 V                                                                                                                                                                                                                                                   |  TP 5 |
|                           | 8  |                                                                                                                                                                                                                                                                            |          | 283 kHz                                                                           | TC 204                                                                                                                                                                | V = 12, 5 V                                                                                                                                                                                                                                                 |                                                                                          |
|                           | 9  | Ve ~ 500 μV/m                                                                                                                                                                             | 160 kHz  | 160 kHz                                                                           |  (Ferrit Ant.)<br>(Bar Ant.)                                                         | max.                                                                                                                                                                                                                                                        |                                                                                          |
|                           | 10 |                                                                                                                                                                                                                                                                            | 250 kHz  | 250 kHz                                                                           | TC 202                                                                                                                                                                |                                                                                                                                                                                                                                                             |                                                                                          |
| Mute level tune indicator |    |                                                                                                                                                                                                                                                                            |          |                                                                                   |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |                                                                                          |
|                           |    |                         | f        |  |                                                                                     |                                                                                       |                                                                                          |
| AM                        | 1  | Ve = 500 μV/m                                                                                                                                                                                                                                                              | 1000 KHz | 1000 KHz                                                                          | VR 201                                                                                                                                                                | DISPLAY 74 dB                                                                                                                                                                                                                                               |                                                                                          |
| FM                        | 2  | Ve = 100 mV                                                                                                                                                                                                                                                                | 98 MHz   | 98 MHz                                                                            | VR 101                                                                                                                                                                | DISPLAY 40 dB                                                                                                                                                                                                                                               |                                                                                          |

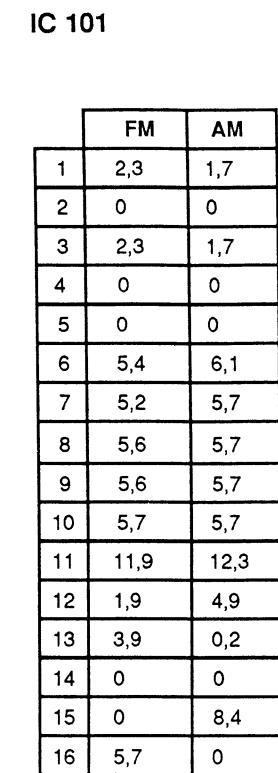


## Abgleich / Alignment / Reglages

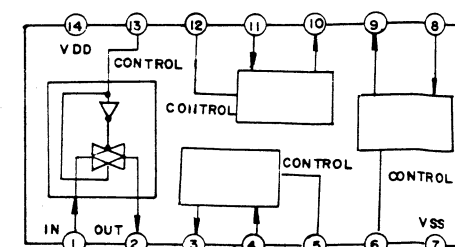
| µP nach FM- und AM-Filter justieren (nur bei gelöschtem IC 501) · Adjust µP to FM- and AM filter (only with erased IC 501) |    |                                                                                                                                                                                     |                                                                                    |                                                                                                |                                                                                                                                 |                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                            | 1  | <div></div><br>(kurzschließen 1 s) · Short circuit longer then 1 s                                 |                                                                                    |                                                                                                |                                                                                                                                 |                                                                                                                                           |
|                                                                                                                            | 2  | FM-Taste drücken<br>Press FM key                                                                                                                                                    | z. B. Keramikfilter „rot“<br>e.g. Ceramic filter „red“                             | 10,70 MHz                                                                                      | 〈 man. tuning 〉<br>- +                                                                                                          |                                                                                                                                           |
|                                                                                                                            | 3  | AM-Taste drücken<br>Press AM key                                                                                                                                                    |                                                                                    | 455 kHz                                                                                        |                                                                                                                                 |                                                                                                                                           |
|                                                                                                                            | 4  | Netzschalter aus/ein<br>Power switch off/on                                                                                                                                         |                                                                                    |                                                                                                |                                                                                                                                 |                                                                                                                                           |
| FM                                                                                                                         |    |                                                                                                                                                                                     |                                                                                    |                                                                                                |                                                                                                                                 |                                                                                                                                           |
|                                                                                                                            |    | <div><math>\Delta f = 75 \text{ kHz}</math>   <math>f = 1 \text{ kHz}</math></div> <div></div>     |                                                                                    | <div></div>   | <div></div>                                  | <div></div>                                            |
| ZF                                                                                                                         | 1  | <div></div> $V_e \sim 1 \text{ mV}$                                                                | z. B. Keramikfilter „rot“<br>e.g. Ceramic filter „red“<br>10,70 MHz                | Senderfreie<br>Frequenz<br>Transmitting-free<br>frequency<br>z. B. 98 MHz                      | T 101, T 102, T 103                                                                                                             | TP 7<br><div></div><br>10,7 MHz                        |
|                                                                                                                            | IF | 2                                                                                                                                                                                   | Antenne an 75 Ohm<br>Antenneneingang<br><br>Antenna<br>to 75 ohms<br>antenna input |                                                                                                | Starken<br>FM-Sender auf<br>seiner Sollfrequenz<br>empfangen<br>tune noise free<br>station to<br>nom. transmitting<br>frequency | T. 103                                                                                                                                    |
| FM                                                                                                                         | 3  |                                                                                                                                                                                     |                                                                                    | 87,5 MHz                                                                                       | L 4                                                                                                                             | <div></div> TP 5 $V = 4 \text{ V} \pm 0,1 \text{ V}$ |
|                                                                                                                            | 4  |                                                                                                                                                                                     |                                                                                    | 108 MHz                                                                                        | TC 4                                                                                                                            | <div></div> TP 5 $V = 23,5 \text{ V}$                |
|                                                                                                                            | 5  | $V_e \sim 1,5 \mu\text{V}$                                                                                                                                                          | 90 MHz                                                                             | 90 MHz                                                                                         | L1-L2-L3                                                                                                                        | <div></div> max.                                     |
|                                                                                                                            | 6  |                                                                                                                                                                                     | 106 MHz                                                                            | 106 MHz                                                                                        | TC 1-TC 2-TC 3                                                                                                                  |                                                                                                                                           |
| Decoder                                                                                                                    |    |                                                                                                                                                                                     |                                                                                    |                                                                                                |                                                                                                                                 |                                                                                                                                           |
|                                                                                                                            |    | <div><math>\Delta f = 67,5 \text{ kHz}</math>   <math>f = 1 \text{ kHz}</math></div> <div></div> |                                                                                    | <div></div> | <div></div>                                | <div></div>                                          |
|                                                                                                                            | 1  | modul. off                                                                                                                                                                          | 98 MHz                                                                             | 98 MHz                                                                                         | VR 301                                                                                                                          | <div></div> TP 3 $F = 19 \text{ kHz}$                |
|                                                                                                                            | 2  | r. channel modul.                                                                                                                                                                   | 98 MHz                                                                             | 98 MHz                                                                                         | VR 302                                                                                                                          | l. ch. minimum                                                                                                                            |
|                                                                                                                            | 3  | l. channel modul.                                                                                                                                                                   | 98 MHz                                                                             | 98 MHz                                                                                         | VR 302                                                                                                                          | r. ch. minimum                                                                                                                            |
|                                                                                                                            | 4  | $V_e \approx 1 \text{ mV}$<br>19 kHz Pilot ohne Mod.<br>19 kHz Pilot without mod.                                                                                                   | 98 MHz                                                                             | 98 MHz                                                                                         | LPF 1                                                                                                                           | r. ch. minimum                                                                                                                            |
|                                                                                                                            |    |                                                                                                                                                                                     |                                                                                    |                                                                                                | LPF 2                                                                                                                           | l. ch. minimum                                                                                                                            |

| AM                        |    |                                                                                                                                                                                          |          |                                                                                   |                                                                                                               |                                                                                                                                                                         |           |
|---------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|                           |    | 30 % mod. 1000 Hz<br>  | f        |  |                             |   |           |
| ZF<br>IF                  | 1  | 10 – 100 mV                                                                                                                                                                              | 455 kHz  | IFT 203                                                                           |                            | max.                                                                                                                                                                    |           |
|                           | 2  | 455 kHz                                                                                                                                                                                  |          | IFT 204                                                                           |                                                                                                               |                                                                                                                                                                         |           |
| MW                        | 3  |                                                                                                                                                                                          | 520 kHz  | T 201                                                                             |                                                                                                               |                                                                                                                                                                         | V = 1,3 V |
|                           | 4  |                                                                                                                                                                                          | 1619 kHz | TC 203                                                                            | V = 23,5 V                                                                                                    |                                                                                                                                                                         |           |
|                           | 5  | Ve ~ 400 $\mu$ V/m                                                                                      | 600 kHz  | 600 kHz                                                                           |  (Ferrit Ant.)<br>(Bar Ant.) |                                                                                      | max.      |
|                           | 6  |                                                                                                                                                                                          | 1400 kHz | 1400 kHz                                                                          | TC 201                                                                                                        |                                                                                                                                                                         |           |
| LW                        | 7  |                                                                                                                                                                                          | 150 kHz  | T 202                                                                             | V = 2,4 V                                                                                                     |  TP 5                                                                                |           |
|                           | 8  |                                                                                                                                                                                          | 283 kHz  | TC 204                                                                            | V = 12, 5 V                                                                                                   |                                                                                                                                                                         |           |
|                           | 9  | Ve ~ 500 $\mu$ V/m                                                                                      | 160 kHz  | 160 kHz                                                                           |  (Ferrit Ant.)<br>(Bar Ant.) |                                                                                      | max.      |
|                           | 10 |                                                                                                                                                                                          | 250 kHz  | 250 kHz                                                                           | TC 202                                                                                                        |                                                                                                                                                                         |           |
| Mute level tune indicator |    |                                                                                                                                                                                          |          |                                                                                   |                                                                                                               |                                                                                                                                                                         |           |
|                           |    |                        | f        |  |                             |   |           |
| AM                        | 1  | Ve = 500 $\mu$ V/m                                                                                                                                                                       | 1000 KHz | 1000 KHz                                                                          | VR 201                                                                                                        | DISPLAY 74 dB                                                                                                                                                           |           |
| FM                        | 2  | Ve = 100 mV                                                                                                                                                                              | 98 MHz   | 98 MHz                                                                            | VR 101                                                                                                        | DISPLAY 40 dB                                                                                                                                                           |           |

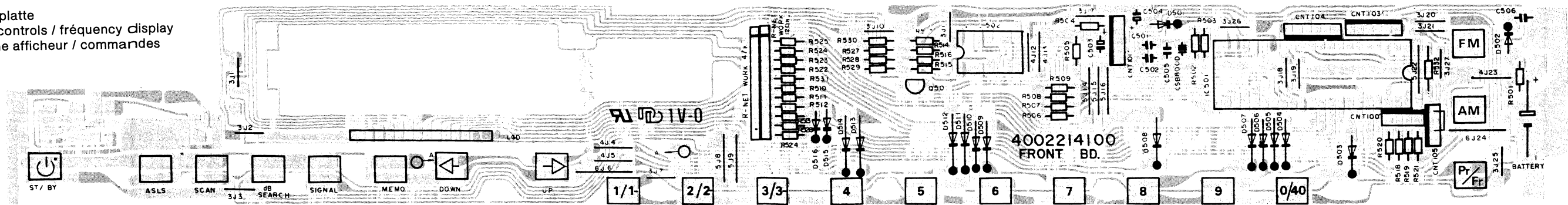




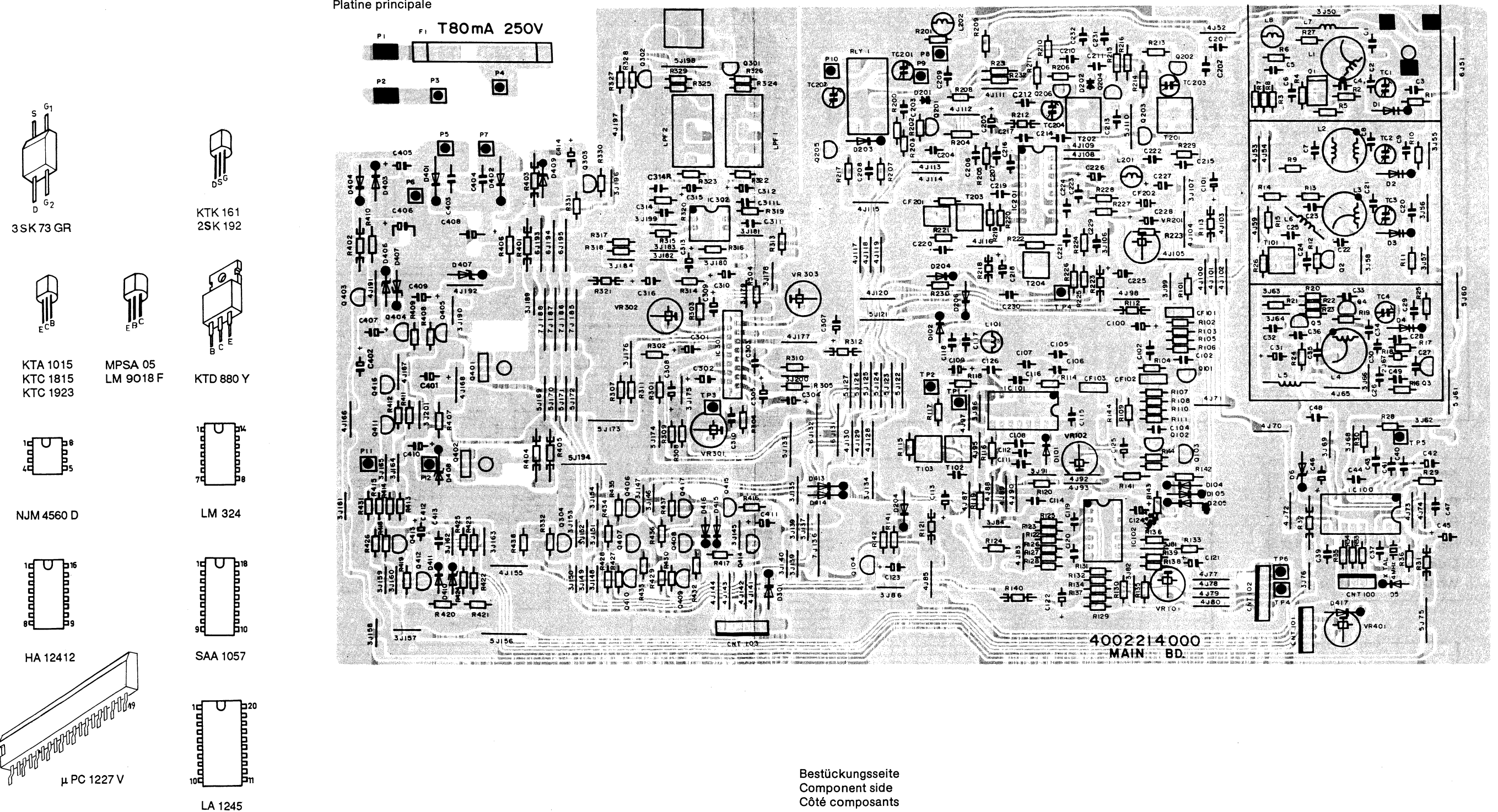
| Keramikfilter | Frequenz  |
|---------------|-----------|
| Black         | 10,64 MHz |
| Blue          | 10,67 MHz |
| Red           | 10,70 MHz |
| Orange        | 10,73 MHz |
| White         | 10,76 MHz |



Frontplatte  
PCB controls / fréquence display  
Platine afficheur / commandes



Grundplatte  
Main board  
Platine principale



# Ersatzteile · Replacement parts · Pièces détachées · CT 7050

| Pos.   | Art.-Nr. | Stck | Bezeichnung                   |
|--------|----------|------|-------------------------------|
| 1      | 282 331  | 1    | Gehäuseblech                  |
| 2      | 282 332  | 1    | Frontblende                   |
| 3      | 282 333  | 1    | Seitentail R                  |
| 4      | 282 334  | 1    | Seitentail L                  |
| 5      | 282 335  | 1    | Blendenträger                 |
| 6      | 282 336  | 1    | Fenster                       |
| 7      | 282 108  | 1    | Druckknopf power              |
| 8      | 282 109  | 1    | Druckfeder                    |
| 9      | 282 337  | 1    | Taste ASLS – Memory           |
| 10     | 282 338  | 1    | Taste Man. Tuning / Auto Scan |
| 11     | 282 339  | 1    | Taste Station 1–5             |
| 11     | 282 340  | 1    | Taste Station 6–0             |
| 13     | 282 341  | 1    | Taste FM Stations             |
| 14     | 282 342  | 1    | Taste AM Stations             |
| 15     | 282 343  | 1    | Taste Program Frequency       |
| 16     | 282 208  | 1    | Display                       |
| 20     | 282 344  | 2    | Lampe                         |
| 23     | 282 345  | 1    | Taster Power                  |
| 24     | 282 127  | 20   | Taster                        |
| 27     | 282 346  | 1    | Antennenbuchse                |
| 28     | 282 347  | 1    | Cinchbuchse 1-fach            |
| 42     | 282 120  | 4    | Fuß                           |
| 43     | 282 121  | 4    | Fußdämpfer                    |
| 45     | 282 348  | 1    | Rückwand                      |
| 46     | 243 750  | 1    | Netzkabel Europa              |
| 48     | 282 349  | 1    | Antennenhalter                |
| 49     | 282 350  | 1    | MW / LW Antenne               |
| 51     | 282 135  | 4    | Schraube 14×8                 |
| 55     | 282 523  | 12   | Schraube 3×8                  |
| 62     | 282 216  | 1    | Transformator                 |
| 63     | 282 165  | 1    | <b>Grundplatte</b>            |
| 64     | 282 205  | 1    | <b>Frontplatte</b>            |
| 65     | 282 352  | 1    | <b>Lampenplatte</b>           |
| D 1    | 275 858  | 4    | Diode 1 SV 68                 |
| D 4    | 275 858  | 4    | Diode 1 SV 68                 |
| D 6    | 282 062  | 1    | Diode DZ 9,1 BM               |
| D 101  | 223 906  | 17   | Diode 1 N 4148                |
| D 102  | 223 906  | 17   | Diode 1 N 4148                |
| D 104  | 223 906  | 17   | Diode 1 N 4148                |
| D 105  | 223 906  | 17   | Diode 1 N 4148                |
| D 106  | 223 906  | 17   | Diode 1 N 4148                |
| D 201  | 268 704  | 2    | Diode KV 1226                 |
| D 202  | 268 704  | 2    | Diode KV 1226                 |
| D 203  | 223 906  | 17   | Diode 1 N 4148                |
| D 206  | 223 906  | 17   | Diode 1 N 4148                |
| D 301  | 223 906  | 17   | Diode 1 N 4148                |
| D 400  | 223 906  | 17   | Diode 1 N 4148                |
| D 401  | 226 501  | 4    | Diode 1 N 4002                |
| D 404  | 226 501  | 4    | Diode 1 N 4002                |
| D 405  | 282 173  | 3    | Diode DZ 15 B                 |
| D 406  | 282 173  | 3    | Diode DZ 15 B                 |
| D 407  | 282 173  | 3    | Diode DZ 15 B                 |
| D 409  | 282 063  | 1    | Diode DZ 12 BM                |
| D 410  | 282 174  | 1    | Diode DZ 5,1 BM               |
| D 411  | 223 906  | 17   | Diode 1 N 4148                |
| D 413  | 223 906  | 17   | Diode 1 N 4148                |
| D 417  | 223 906  | 17   | Diode 1 N 4148                |
| D 501  | 223 906  | 16   | Diode 1 N 4148                |
| D 516  | 223 906  | 16   | Diode 1 N 4148                |
| L 1    | 282 179  | 1    | Spule                         |
| L 2    | 282 180  | 1    | Spule                         |
| L 3    | 282 181  | 1    | Spule                         |
| L 4    | 282 182  | 1    | Spule                         |
| L 5    | 282 191  | 3    | Spule 2,2 UH                  |
| L 6    | 282 191  | 3    | Spule 2,2 UH                  |
| L 7    | 282 191  | 3    | Spule 2,2 UH                  |
| L 8    | 282 192  | 1    | Spule 47 UH                   |
| L 101  | 282 194  | 1    | Spule 20,8 UH                 |
| L 201  | 282 193  | 1    | Spule 7,8 UH                  |
| L 202  | 282 195  | 1    | Spule 2,2 MH                  |
| L 9999 | 282 206  | 1    | Quarz CS B 800 D              |
| Q 1    | 282 168  | 1    | Transistor 3 SK 73 GR         |
| Q 2    | 282 171  | 2    | Transistor KTC 1923 Y         |
| Q 3    | 282 171  | 2    | Transistor KTC 1923 Y         |

| Pos.   | Art.-Nr. | Stck | Bezeichnung                  |
|--------|----------|------|------------------------------|
| Q 4    | 282 169  | 2    | Transistor KTK 161 Y         |
| Q 5    | 282 169  | 2    | Transistor KTK 161 Y         |
| Q 101  | 282 172  | 2    | Transistor LM 9018 F         |
| Q 102  | 282 172  | 2    | Transistor LM 9018 F         |
| Q 103  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 104  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 201  | 282 170  | 1    | Transistor 2 SK 192 GR       |
| Q 202  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 206  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 301  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 302  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 303  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 304  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 401  | 282 057  | 2    | Transistor KTD 880 Y         |
| Q 402  | 282 057  | 2    | Transistor KTD 880 Y         |
| Q 403  | 282 059  | 1    | Transistor MPS A05           |
| Q 404  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 405  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 406  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 407  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 409  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 410  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 411  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 412  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 413  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 414  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 415  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 416  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 417  | 282 077  | 7    | Transistor KTA 1015 Y        |
| Q 428  | 282 076  | 18   | Transistor KTC 1815 Y        |
| Q 501  | 282 076  | 1    | Transistor KTC 1815 Y        |
| R 1    | 282 214  | 1    | Netzwerk 11×473 G            |
| R 2    | 282 213  | 1    | Netzwerk 11×124 G            |
| T 101  | 282 393  | 1    | Spule                        |
| T 102  | 282 183  | 1    | Spule                        |
| T 103  | 282 184  | 1    | Spule                        |
| T 201  | 282 186  | 1    | Spule                        |
| T 202  | 282 187  | 1    | Spule                        |
| T 203  | 282 189  | 1    | Spule                        |
| T 204  | 282 188  | 1    | Spule                        |
| BA 1   | 282 207  | 1    | Akku CR 2439-8               |
| CF 101 | 282 196  | 3    | Keramikfilter SFZ 10,7 M2    |
| CF 102 | 282 196  | 3    | Keramikfilter SFZ 10,7 M2    |
| CF 103 | 282 196  | 3    | Keramikfilter SFZ 10,7 M2    |
| CF 201 | 282 198  | 1    | Keramikfilter SFP 455        |
| CF 202 | 282 197  | 1    | Keramikfilter BPU 455        |
| CR 1   | 282 175  | 1    | Quarz 4 MHz                  |
| IC 100 | 274 730  | 1    | IC SAA 1057                  |
| IC 101 | 268 204  | 1    | IC HA 12412                  |
| IC 102 | 261 352  | 1    | IC LM 324                    |
| IC 201 | 282 167  | 1    | IC LA 1245                   |
| IC 301 | 282 166  | 1    | IC UPC 1227                  |
| IC 302 | 274 480  | 1    | IC NJM 4560 DX               |
| IC 501 | 281 970  | 1    | IC UP HD 44840 / B 08        |
| IC 502 | 261 874  | 1    | IC MC 14016 BCP MOS          |
| LD 1   | 282 208  | 1    | Display                      |
| LF 1   | 282 190  | 2    | Spule MPX                    |
| LF 2   | 282 190  | 2    | Spule MPX                    |
| RY 1   | 282 176  | 1    | Relay RZ 12                  |
| TC 1   | 282 177  | 4    | Trimmer TZ 03 7110 F         |
| TC 4   | 282 177  | 4    | Trimmer TZ 03 7110 F         |
| TC 201 | 282 178  | 2    | Trimmer TZ 03 R 200 F        |
| TC 202 | 282 178  | 2    | Trimmer TZ 03 R 200 F        |
| VR 101 | 282 202  | 1    | Steller 33 kΩ                |
| VR 102 | 282 203  | 1    | Steller 47 kΩ                |
| VR 201 | 282 201  | 1    | Steller 22 kΩ                |
| VR 301 | 282 200  | 1    | Steller 10 kΩ                |
| VR 302 | 282 199  | 2    | Steller 4,7 kΩ               |
| VR 303 | 282 199  | 2    | Steller 4,7 kΩ               |
| VR 401 | 282 204  | 1    | Steller 1 kΩ                 |
| 9000   | 281 430  | 1    | Bedienungs-Anleitung CT 7050 |
| 9001   | 282 526  | 1    | Verpackung kpl. CT 7050      |

Änderungen vorbehalten! Subject to change! Sous réserve de modification!